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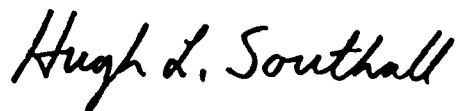
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FOR THE COMMANDER

A handwritten signature in black ink, appearing to read "Hugh L. Southall".

Hugh L. Southall, Lt. Col., USAF
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FOREWORD

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904	Opportunities for Advanced Speech Processing in Military Computer-Based Systems	Weinstein, C.J.	11 Feb. 1991
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930	An Efficient A* Stack Decoder Algorithm for Continuous Speech Recognition with a Stochastic Language Model	Paul, D.B.	18 July 1991 ADA240745
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6285	Industrial Applications of Dye Lasers	Klick, D.I.	Chapter 8 in <i>Dye Laser Principles: With Applications</i> , Academic Press, Inc., 1990, pp. 345-412
6315	Binary Integration of Fluctuating Targets	Weiner, M.A.	IEEE Trans. Aerosp. Electron. Syst., Vol. 27, No. 1, January 1991, pp. 11-17 ADA235443
6354A	Linear Array Characteristics with One-Dimensional Reactive-Region Near-Field Scanning: Simulations and Measurements	Fenn, A.J. Aumann, H.M. Willwerth, F.G.	IEEE Trans. Antennas Propag., Vol. 39, No. 9, September 1991, pp. 1305-1311
6366	Computer Algebra Applied to Radiation from Microstrip Discontinuities	Abouzahra, M.D. Pavelle, R.	J. Symb. Comput., Vol. 10, 1990, pp. 525-528
6371	Visible Laser Radar: Range Tomography and Angle-Angle-Range	Knight, F.K. Klick, D.I. Ryan-Howard, D.P. Theriault, J.R., Jr.	Opt. Eng., Vol. 30, No. 1, January 1991, pp. 55-63 ADA235450
6381	Peak-to-RMS Reduction of Speech Based on a Sinusoidal Model	Quatieri, T.F. McAulay, R.J.	IEEE Trans. Signal Process., Vol. 39, No. 2, February 1991, pp. 273-288
6382	Calculation of Probability of Detection for Log-Normal Target Fluctuations	Shnidman, D.A.	IEEE Trans. Aerosp. Electron. Syst., Vol. 27, No. 1, January 1991, pp. 172-174 ADA235455
6401	Parameter Trade-offs for Imaging Spectroscopy Systems	Kerekes, J.P. Landgrebe, D.A.	IEEE Trans. Geosci. Remote Sens., Vol. 29, No. 1, January 1991, pp. 57-65

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6423	Polylogarithmic Ladders	Abouzahra, M.D. Lewin, L.	Chapter 3 in <i>Structural Properties of Polylogarithms</i> , American Mathematical Society, 1991, pp. 27-47
6424	Ladders in the Trans-Kummer Region	Abouzahra, M.D. Lewin, L.	Chapter 4 in <i>Structural Properties of Polylogarithms</i> , American Mathematical Society, 1991, pp. 49-68
6425	Supernumary Ladders	Abouzahra, M.D. Lewin, L.	Chapter 5 in <i>Structural Properties of Polylogarithms</i> , American Mathematical Society, 1991, pp. 69-96
6432	Effect of Synchrotron X-Ray Radiation on the Channel Hot-Carrier Reliability of Reoxidized Nitrided Silicon Dioxide	Dunn, G.J.	IEEE Electron Device Lett., Vol. 12, No. 1, January 1991, pp. 8-9 ADA235364
6441	I/f Frequency Noise Effects on Self-Heterodyne Linewidth Measurements	Mercer, L.B.	J. Lightwave Technol., Vol. 9, No. 4, April 1991, pp. 485-493
6447	An Analytical Model of Earth-Observational Remote Sensing Systems	Kerekes, J.P. Landgrebe, D.A.	IEEE Trans. Syst. Man Cybern., Vol. 21, No. 1, January/February 1991, pp. 125-133
6448	High-Voltage Picosecond Photoconductor Switch Based on Low-Temperature-Grown GaAs	Frankel, M.Y. Whitaker, J.F. Mourou, G.A. Smith, F.W., III Calawa, A.R.	IEEE Trans. Electron Devices, Vol. 37, No. 12, December 1990, pp. 2493-2498
6454	Dynamic Suppression of Interface-State Dark Current in Buried-Channel CCD's	Burke, B.E. Gajar, S.A.	IEEE Trans. Electron Devices, Vol. 38, No. 2, February 1991, pp. 285-290 ADA235496

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6455	Capacitance-Voltage Measurements on Metal-SiO ₂ -Diamond Structures Fabricated with (100)- and (111)-Oriented Substrates	Geis, M.W. Gregory, J.A. Pate, B.B.	IEEE Trans. Electron Devices, Vol. 38, No. 3, March 1991, pp. 619-626 ADA235937
6456	Physical Optics Polarization Scattering Matrix for a Top Hat Reflector	Blejer, D.J.	IEEE Trans. Antennas Propag., Vol. 39, No. 6, June 1991, pp. 857-859 ADA241440
6458	Efficient Coupling of Multiple Diode Laser Arrays to an Optical Fiber by Geometric Multiplexing	Fan, T.Y.	Appl. Opt., Vol. 30, No. 6, 20 February 1991, pp. 630-632
6461	Streamlining Measurement Iteration for EKF Target Tracking	Kerr, T.H., III	IEEE Trans. Aerosp. Electron. Syst., Vol. 27, No. 2, March 1991, pp. 408-421
6469	Fourier Analysis Through Geometrically Represented Signal Voltages	Levine, R.Y. Zatet, M.	Rev. Sci. Instrum., Vol. 62, No. 11, November 1991, pp. 2602-2611
6479	The Effects of Spatial Hole Burning and Energy Diffusion on the Single-Mode Operation of Standing-Wave Lasers	Zayhowski, J.J.	IEEE J. Quantum Electron., Vol. 26, No. 12, December 1990, pp. 2052-2057
6481	Polysilyne Thin Films as Resists for Deep Ultraviolet Lithography	Kunz, R.R. Horn, M.W. Goodman, R.B. Bianconi, P.A. Smith, D.A. Freed, C.A.	J. Vac. Sci. Technol. B, Vol. 8, No. 6, November/December 1990, pp. 1820-1825
6485	Low-Rate Speech Coding Based on the Sinusoidal Model	McAulay, R.J. Quatieri, T.F.	Chapter 6 in <i>Advances in Speech Signal Processing</i> , Marcel Dekker, Inc., 1992, pp. 165-208
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6495	Silylation Processes Based on Ultraviolet Laser-Induced Crosslinking	Hartney, M.A. Rothschild, M. Kunz, R.R. Ehrlich, D.J. Shaver, D.C.	J. Vac. Sci. Technol. B, Vol. 8, No. 6, November/December 1990, pp. 1476-1480 ADA235722
6499	Channel Hot-Carrier Stressing of Reoxidized Nitrided Oxide p-MOSFET's	Dunn, G.J. Krick, J.T.	IEEE Trans. Electron Devices, Vol. 38, No. 4, April 1991, pp. 901-906 ADA235468
6505	Reduced-Confinement GaAlAs Tapered Waveguide Antennas for Enhanced Far-Field Beam Directionality	Bossi, D.E. Goodhue, W.D. Johnson, L.M. Rediker, R.H.	IEEE J. Quantum Electron., Vol. 27, No. 3, March 1991, pp. 687-695 ADA241497
6511	An Abutable CCD Imager for Visible and X-Ray Focal Plane Arrays	Burke, B.E. Mountain, R.W. Harrison, D.C. Bautz, M.W. Doty, J.P. Ricker, G.R. Daniels, P.J.	IEEE Trans. Electron Devices, Vol. 38, No. 5, May 1991, pp. 1069-1076 ADA237823
6512	Electromagnetic Theory of Range-Doppler Imaging in Laser Radar. I: Scattering Theory	Steinbach, A.L.	J. Opt. Sci. Am. A, Vol. 8, No. 8, August 1991, pp. 1287-1295
6516	An Experimental Adaptive Nulling Receiver Utilizing the Sample Matrix Inversion Algorithm with Channel Equalization	Johnson, J.R. Fenn, A.J. Aumann, H.M. Willwerth, F.G.	IEEE Trans. Microw. Theory Tech., Vol. 39, No. 5, May 1991, pp. 798-808

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6518	Ultraviolet, Visible, and Infrared Response of PtSi Schottky-Barrier Detectors Operated in the Front-Illuminated Mode	Chen, C.K. Nechay, B.A. Tsaur, B-Y.	IEEE Trans. Electron Devices, Vol. 38, No. 5, May 1991, pp. 1094-1103 ADA242248
6519	Ultrafast Shallow-Buried-Channel CCD's with Built-in Drift Fields	Lattes, A.L. Munroe, S.C. Seaver, M.M.	IEEE Electron Device Lett., Vol. 12, No. 3, March 1991, pp. 104-107 ADA241449
6520	Optical Interconnections in Digital Systems-Status and Prospects	Tsang, D.Z.	Opt. Photon. News, Vol. 1, No. 10, October 1990, pp. 23-29
6521	Liquid-Nitrogen-Cooled Ti:Al ₂ O ₃ Laser	Schulz, P.A. Henion, S.R.	IEEE J. Quantum Electron., Vol. 27, No. 4, April 1991, pp. 1039-1047 ADA241445
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6537	Diamond Transistor Performance and Fabrication	Geis, M.W.	Proc. IEEE, Vol. 79, No. 5, May 1991, pp. 669-676
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6548	Oscillations up to 712 GHz in InAs/AlSb Resonant-Tunneling Diodes	Brown, E.R. Söderström, J.R. Parker, C.D. Mahoney, L.J. Molvar, K.M. McGill, T.C.	Appl. Phys. Lett., Vol. 58, No. 20, 20 May 1991, pp. 2291-2293 ADA241448
6550	Frequency-Modulated Nd:YAG Laser	Schulz, P.A. Henion, S.R.	Opt. Lett., Vol. 16, No. 8, 15 April 1991, pp. 578-580 ADA237824
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6560	Surface-Impedance Measurements of Superconducting NbN Films	Oates, D.E. Anderson, A.C. Chin, C.C. Derov, J.S. Dresselhaus, G. Dresselhaus, M.S.	Phys. Rev. B, Vol. 43, No. 10, 1 April 1991, pp. 7655-7663
6564	Magneto-Optical Study of Donor-Level Crossing in Tipped GaAs/(Ga,Al)As Quantum Wells	Mueller, E.R. Goodhue, W.D. Larsen, D.M. Bales, J.W. Waldman, J.	Phys. Rev. B, Condens. Matter, Vol. 44, No. 4, 15 July 1991, pp. 1754-1761
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6566	Identification of a Paramagnetic Nitrogen Dangling Bond Defect in Nitrided Silicon Dioxide Films on Silicon	Chaiyasena, I.A. Lenahan, P.M. Dunn, G.J.	Appl. Phys. Lett., Vol. 58, No. 19, 13 May 1991, pp. 2141-2143
6567	Operation of a Coherent Ensemble of Five Diode Lasers in an External Cavity	Rediker, R.H. Rauschenbach, K.A. Schloss, R.P.	IEEE J. Quantum Electron., Vol. 27, No. 6, June 1991, pp. 1582-1593
6569	Simultaneous SO(2n) Generator Measurement by Spin-Clifford Algebra Coupling	Levine, R.Y.	Found. Phys. Lett., Vol. 4, No. 2, April 1991, pp. 191-195
6570	Nitrogen-Implanted Aluminum for Planarized Insulation	Herndon, T.O.	J. Electrochem. Soc., Vol. 138, No. 10, October 1991, pp. 3107-3111

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6572	Prevention of In Evaporation and Preservation of Smooth Surface in Thermal Annealing and Mass Transport of InP	Liau, Z-L.	Appl. Phys. Lett., Vol. 58, No. 17, 29 April 1991, pp. 1869-1871 ADA236136
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6577	Comments on "Federated Square Root Filter for Decentralized Parallel Processes"	Kerr, T.H., III	IEEE Trans. Aerosp. Electron. Syst., Vol. 27, No. 6, November 1991, pp. 946-949
6578	Microlens Integration with Diode Lasers and Coherent Phase Locking of Laser Arrays	Liau, Z-L. Diadiuk, V. Walpole, J.N.	Linc. Lab. J., Vol. 3, No. 3, Fall 1990, pp. 385-394
6580	III-V Diode Lasers for New Emission Wavelengths	Choi, H-K. Wang, C.A. Eglash, S.J.	Linc. Lab. J., Vol. 3, No. 3, Fall 1990, pp. 395-412
6581	Ultrastable CO ₂ Lasers	Freed, C.	Linc. Lab. J., Vol. 3, No. 3, Fall 1990, pp. 479-500
6582	Visual Learning, Adaptive Expectations, and Behavioral Conditioning of the Mobile Robot MAVIN	Baloch, A.A. Waxman, A.M.	Neural Netw., Vol. 4, No. 3, 1991, pp. 271-302
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6589	Binary Optics Microlens Arrays in CdTe	Stern, M.B. Delaney, W.F. Holz, M.K.O. Kunz, K.P. Maschhoff, K.R. Welsch, J.	Materials Research Society Symp. Proc., Vol. 216, 1991, pp. 107-112 ADA241496
6591	AllInGaAs/AlGaAs Separate-Confinement Heterostructure Strained Single Quantum Well Diode Lasers Grown by Organometallic Vapor Phase Epitaxy	Wang, C.A. Walpole, J.N. Missaggia, L.J. Donnelly, J.P. Choi, H-K.	Appl. Phys. Lett., Vol. 58, No. 20, 20 May 1991, pp. 2208-2210 ADA241452
6592	Note on "The Calculation of the Probability of Detection and the Generalized Marcum Q-Function"	Shnidman, D.A.	IEEE Trans. Inf. Theory, Vol. 37, No. 4, July 1991, p. 1233 ADA242245
6593	High-Power-Density GaAs MISFET's with a Low-Temperature-Grown Epitaxial Layer as the Insulator	Chen, C-L. Smith, F.W., III Clifton, B.J. Mahoney, L.J. Manfra, M.J. Calawa, A.R.	IEEE Electron Device Lett., Vol. 12, No. 6, June 1991, pp. 306-308 ADA241450
6594	Long-Wavelength Ge _x Si _{1-x} /Si Heterojunction Infrared Detectors and 400 × 400-Element Imager Arrays	Tsaur, B-Y. Chen, C.K. Marino, S.A.	IEEE Electron Device Lett., Vol. 12, No. 6, June 1991, pp. 293-296 ADA241451
6595	Large-Area Mosaic Diamond Films Approaching Single-Crystal Quality	Geis, M.W. Smith, H.I. Argoitia, A. Angus, J. Ma, G-H.M. Glass, J.T. Butler, J. Robinson, C.J. Pryor, R.	Appl. Phys. Lett., Vol. 58, No. 22, 3 June 1991, pp. 2485-2487 ADA241441

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6597	Wide-Field-of-View Heterodyne Receiver Using a Photorefractive Double Phase-Conjugate Mirror	Adams, L.E. Bondurant, R.S.	Opt. Lett., Vol. 16, No. 11, 1 June 1991, pp. 832-834 ADA241446
6598	Fast Electro-Optic Wavelength Selection and Frequency Modulation in Solid State Lasers	Schulz, P.A.	Linc. Lab. J., Vol. 3, No. 3, Fall 1990, pp. 463-500
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6600	Scalable High-Power Optically Pumped GaAs Laser	Le, H.Q. DiCecca, S. Mooradian, A.	Appl. Phys. Lett., Vol. 58, No. 18, 6 May 1991, pp. 1967-1969 ADA241442
6601	Room-Temperature CW Operation of GaAs-AlGaAs Diode Lasers on Silicon-on-Insulator Wafers	Choi, H-K. Wang, C.A. Karam, N.H.	IEEE Photon. Technol. Lett., Vol. 3, No. 4, April 1991, pp. 289-291 ADA242253
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